

REMARKS

In the patent application, claims 1-3, 5-10, and 12-23 are pending.

In the office action, claims 1-3, 6-10, 13-21 and 23 are rejected, and claims 5, 12 and 22 are objected to but would be allowable if rewritten in independent form.

Claims 1-3, 6-10, 13-21 and 23 are rejected under 35 USC §103(a) as being unpatentable over *Sammarco* (U.S. Patent Application Publication No. 2004/0121781) in view of *Chitrapu* (U.S. Patent Application Publication No. 2004/0092265), and further in view of *Nave et al.* (U.S. Patent No. 7,324,810, hereafter referred to as *Nave*).

Claimed Invention Distinguishable over Cited References

It is respectfully submitted that the claimed invention is distinguishable over the cited *Sammarco*, *Chitrapu* and *Nave* references at least in four aspects. In the claimed invention:

- 1) there are at least **two currently** active cellular network systems connected to a communication device;
- 2) the communication device has at least **two active connections** for connected applications – at least one **active connection** for **each** of the currently active cellular network systems for a connected application;
- 3) the communication device **simultaneously** hosts at least **two connected applications**; and
- 4) the communication device **obtains** information about at least two currently active cellular network systems regarding **the number and type of connections** currently in use.

The Examiner fails to clearly point out how the cited references, individually or in combination, disclose each of the above-listed limitations.

Improper Claim Rejection under 35 U.S.C. 103

I. The Examiner improperly points to **scanning** as being equivalent to active connection (Section 2, lines 11-14).

As pointed out in Section C below, *Sammarco* discloses scanning for an alternate wireless communication system as a way to detect the availability of an alternative wireless communication system, and the term “scan” includes any operations for detecting the presence of

a wireless communication system, including by searching within a frequency range for one or more control channels or traffic channels, and/or searching for one or more patterns or code sequence.

As known in the art, scanning for a system is monitoring a frequency band for energy. It is only passive reception of a signal in that frequency band. As such, the system being detected may not even realize that it is being detected. Thus, the act of “scanning” is not equivalent to an active connection for a connected application? The same searching technique has been commonly used in radio astronomy, where radio waves in a certain frequency band are used to conduct passive search in space for a celestial object that emits radio waves in that frequency band. A person skilled in the art would not consider that there is an active connection between the radio telescope and the detected celestial object.

Furthermore, if the communication device already has an active connection to a particular wireless system, why the communication device still tries to detect the availability or presence of the already connected wireless system? Moreover, according to the claimed invention, active connections are for connected applications. Merely detecting the presence of a wireless system cannot be an active connection for a connected application.

II. The Examiner improperly uses the combination of cited references:

a) The Examiner fails to clearly point out how the cited references, individually or in combination, disclose that the communication device has at least **two active connections**, one to each of **two** currently active network systems.

The Examiner only alleges that the cited references disclose **one** currently active network system and **one** active connection (Section 4 of office action, lines 4-6), and that the multi-mode terminal in *Sammarco* is capable of communicating using different protocols, such as GSM and IS-136 (Section 4, lines 8-10).

b) The Examiner fails to clearly point out how the cited references in combination disclose that the communication device **simultaneously** hosts at least **two** connected applications.

The Examiner considers **handoff** as being an application (Section 4, lines 14). Nevertheless, the Examiner fails to address the issue of two connected applications **simultaneously** hosted by the communication device.

It is known to the art that **handoff** is performed by a device for switching **from** an existing network **to** a new network. As pointed out in Section C below, in switching from one network to another network, the device does not have active connections with both networks, and there cannot be two connected applications hosted by the device.

c) The Examiner fails to clearly point out how the cited references in combination disclose that the communication device **obtains** information about at least two currently active cellular network systems regarding **the number and type of connections** currently in use.

The Examiner admits that *Sammarco*, in view of *Chitrapu*, does not explicitly teach “wherein the information includes at least the number and type of connections currently in use” (page 5, third paragraph, lines 1-2). Nevertheless, the Examiner fails to point out how the combined teachings of *Sammarco*, *Chitrapu* and *Nave* disclose that the communication obtains information about two currently active network systems that have active connections with the communication device, wherein the information includes at least the number and type of the connections currently in use.

The Examiner only cites *Nave* for disclosing “broadcasting of data to large number of users with electronic devices that have simultaneous connections (page 5, third paragraph, lines 2-3). The Examiner alleges that since the communication device broadcast data to a large number of users as disclosed in *Nave*, the combined teachings of *Sammarco*, *Chitrapu* and *Nave* disclose “**providing** information and data **to** several devices via wireless connections” (page 5, last paragraph, lines 1-3). The Examiner fails to explain why “the communication device **provides** information and data **to** the users” is equivalent to “the communication device **obtains** information about the users regarding the type of connections currently in use”.

As pointed out in Section E below, *Nave* only discloses using a cell simulator (CS) to allow a large number of subscribers to receive the data transmitted by a base station. This is not equivalent to providing information regarding the type of connections currently in use to the subscribers as suggested by the Examiner. Furthermore, “allowing a large number of subscribers to receive data from a base station” is not equivalent to “obtaining information by the base

station about the subscribers” regarding the type of connections currently in use. Since *Sammarco*, in view of *Chitrapu*, fails to disclose that the communication device **obtains** information about the type of connections currently in use, and *Nave* only discloses broadcasting data to a large number of users, it is not clear how *Sammarco*, in view of *Chitrapu*, and further in view of *Nave*, discloses that the communication device **obtains** information about the type of connections currently in use.

A. The Claimed Invention

Independent claim 1 includes the limitation that 1) the communication device has one or more active connections to each of at least two currently active cellular networks, 2) the communication device obtains information including the number and type of connections currently in use, and 3) the communication device decides whether to allow a new connection based on factors including information about currently active cellular network systems.

As such, the claimed invention requires

“at least two currently active cellular network systems to each of which the communication device has one or more active connections for respective connected applications *simultaneously* hosted by the communication device”; therefore the claimed invention recites *at least two* active connections (i.e., at minimum, [at least] one active connection for each of [at least] two currently active cellular network systems).

B. Claim Rejections under 35 USC §103

At section 4 of the Office Action, claims 1-3, 6-10, 13-21 and 23 are rejected under 35 USC §103(a) as being unpatentable over *Sammarco*, in view of *Chitrapu*, and further in view of *Nave*. Of the claims so rejected, the independent claims are claims 1, 8, 16 and 21.

In rejecting claim 1, the Examiner states that *Sammarco* discloses a device obtaining information about one currently active cellular network system to which the device has one active connection for connected applications hosted by the device (Section 4 of the office action, lines 4-6), wherein the device gains information about other systems by scanning for alternative communication system (Section 4, lines 7-8), and the terminal may communicate according to two or more protocols (Section 4, lines 8-10). Thus, *Sammarco* teaches “connection to active cellular networks” (Section 4, line 16).

The Examiner only cites *Chitrapu* for disclosing information about combinations of different connections allowed by each currently active network system (page 5, first paragraph, lines 1-3).

The Examiner only cites *Nave* for disclosing broadcasting of data to large number of users (page 5, third paragraph, lines 2-4).

As pointed out in Section *C* below, *Sammarco* does not disclose or suggest “connection to active cellular networks” as asserted by the Examiner.

As pointed out in Section *D* below, *Chitrapu* does not disclose factors including the information about currently active cellular network systems.

As pointed out in Section *E* below, *Nave* does not disclose that the information includes the number or type of connections currently in use.

Furthermore, the Examiner fails to clearly point out how the combined teachings of *Sammarco*, *Chitrapu* and *Nave* disclose two connected applications simultaneously hosted by the communication device.

C. The Cited Sammarco Reference

Sammarco does not disclose or suggest connection to active cellular networks for connected applications.

As admitted by the Examiner, *Sammarco* discloses a device obtaining information about **one** currently active cellular network. The Examiner states that *Sammarco* discloses that the device scans for alternate communications systems and, therefore, gains information about other systems (Figure 5, item 130). The Examiner also states that *Sammarco* discloses a multi-mode wireless terminal 10 configured to communicate with at least two types of wireless communication systems 20 and 30 (paragraph [0016]), and that the wireless terminal 10 may be configured to communicate according to two or more wireless communication protocols (paragraph [0018]).

It is respectfully submitted that *Sammarco* does not disclose or suggest the communication device obtaining information about at least two currently active cellular network systems to each of which the communication device has one or more active connections for respective connected applications *simultaneously* hosted by the communication device.

First, scanning for a system is not equivalent to an “active connection” for connected applications. In particular, *Sammarco* discloses scanning for an alternate wireless communication system as a way to detect the availability of an alternative wireless communication system (paragraphs [0030], [0035]). The term “scan” includes any operations for detecting the presence of a wireless communication system, including by searching within a frequency range for one or more control channels or traffic channels, and/or searching for one or more patterns or code sequence (paragraph [0020]). If the communication device already has an active connection to a particular wireless system, it does not make sense for the communication device to detect the availability or the presence of the already connected wireless system.

Second, according to *Sammarco*, the wireless terminal 10 scans for an alternative wireless communication system only if device 10 has moved out of a selected geographic region. If the wireless terminal 10 has determined to have not moved out of the selected geographic region, it does not scan for an alternate wireless communication system (the operation ends at block 120, paragraph [0035] – note: Figure 5 is erroneous).

Third, *Sammarco* discloses two wireless communication systems 20 and 30. The wireless communication system 20 provides communication services within geographic regions 20a-c, whereas the wireless communication system 30 provides communication services within the geographic regions 30a-b. The geographic regions 30a-b may overlap with some of geographic regions 20a-c (paragraph [0020], Figure 2). When the wireless terminal 10 is located in the selected geographic region 20c, it is registered to receive services from the wireless communication system 20 (paragraph [0022]). When the wireless terminal 10 has moved out of the selected geographic region 20c, it may remain registered with the wireless communication system 20 while scanning for an alternative wireless communication system. With the wireless terminal 10 being located at the region 20b/30a, it may detect the availability of the wireless communication system 30. The wireless terminal 10 may register with wireless communication system 30 and stop using the services of communication system 20 (paragraph [0023]).

Fourth, although *Sammarco* discloses that the wireless terminal 10 may be configured to communicate according to two or more wireless communication protocols (paragraph [0018]). *Sammarco* does not disclose that the wireless terminal 10 has two active connections to two currently active network systems for connected applications.

In summary, *Sammarco* discloses that when the wireless terminal 10 is located in a selected geographic region, it is registered to receive services from one wireless communication system 20. When it has moved out the selected geographic region, it scans for an alternative communication system. Once it has detected the presence of the communication system 30, it **stops** using the services from the wireless communication system 20 and registers with the communication system 30 instead. Thus, *Sammarco* discloses the wireless terminal 10 has active connections to **one** wireless communication system at a time.

The Examiner fails to show where *Sammarco* discloses that the communication device has active connections to at least two currently active cellular network systems for connected applications.

D. The Cited Chitrapu Reference

The Examiner admits that *Sammarco* fails to disclose deciding whether to allow establishing a new connection to one of the currently active cellular network systems based on factors including the information about the currently active cellular network systems. The Examiner points to *Chitrapu* for disclosing that feature (Figure 2, items 14a, 22 and 24; Figure 4, Steps S2 and S4; paragraph [0015], lines 1-12; paragraph [0016]-[0017]).

It is respectfully submitted that items 14a, 22 and 24 in Figure 2 are a cell phone, a network A and a network B. In Figure 4, S2 is a step to determine if there is any benefit to switching between networks 26 and 28 (paragraphs [0015], [0022]), and if so, the next step would be S4 for determining whether all the active devices are capable of functioning with the new network (paragraph [0023]). Paragraph [0016] discloses the desired capabilities of a cell phone 14 so that the connections and needs of the cell phone adequately match with a network. Paragraph [0017] discloses the criteria for a PDA as being compatible with networks A and B.

Chitrapu is concerned only with handover (or handoff) performed by a device from an existing network to a new network (paragraphs [0022]). Before the handover, the device examines the benefit of switching (Figure 4, S2; paragraph [0022]; step (a) in Claim 1) and whether the active devices function with the new network (Figure 4, S4; paragraph [0023]; step (b) in Claim 1). Based on the examinations, the handover will take place (Figure 4, S5; paragraph [0024]).

Since neither *Sammarco* nor *Chitrapu* disclose the communication device obtaining information about at least two currently active cellular network systems to each of which the communication device has one or more active connections for respective connected applications *simultaneously* hosted by the communication device, the combined teachings of *Sammarco* and *Chitrapu* fail to disclose deciding whether to allow establishing a new connection to one of the currently active cellular network systems based on factors including the information about the currently active cellular network systems.

E. The Cited Nave Reference

The Examiner admits that *Sammarco* and *Chitrapu* fail to disclose information about the number and the type of connections currently in use, but points to *Nave* for disclosing this feature (col. 4, lines 20-65; col.5, lines 14-44).

It is respectfully submitted that *Nave* discloses a system and method wherein a cellular phone network infrastructure is used to broadcast data to consumer masses or a large number of subscribers (Abstract; col.3, lines 1-4). According to *Nave*, the subscribers are equipped with specially designed electronic devices that receive the data from the cellular based station transmitter and display it (col.4. lines 22-24). The specially designed electronic devices are referred to as End User Terminals (EUTs) (col.4, lines 35-40). The cellular phone network infrastructure that is used to broadcast data is a new commercial data broadcasting media (CBM) system. The ETUs are pre-programmed to follow the handshake procedure between a cellular base station and a cell phone belonging to a cell simulator, or CS (col.4, lines 40-43). After the handshake procedure between the base station and the CS, any data that is transmitted from the base station and the CS can be received by all the ETU units in the proximity of the base station (col.4, lines 60-65). *Nave* discloses what the CBM administrator does with a chosen CS so that all the ETU units can receive the data transmitted by the base station and the CS (col.5, lines 14-44).

Nave discloses using a CS to allow a large number of subscribers to receive the data transmitted by a base station.

First, each of the ETUs of the subscribers is not equivalent to one of at least two cellular network systems to which the communication device is currently actively connected, and the

base station is not equivalent to the communication device currently connected to at least two cellular network systems.

Second, the fact that the base station broadcasts data using a CS so as to allow a number of end user terminals to receive the transmitted data does not suggest that the base station broadcasts the information about the “number” of ETUs.

Third, the fact that the base station broadcasts data using a CS does not suggest that the base station broadcasts the information about the active connections.

Nave does not disclose providing information about the number of connections currently in use. *Nave* does not disclose providing information about the type of connections currently in use between the communication device and at least two currently active cellular network systems. *Sammarco*, in view of *Chitrapu*, does not disclose obtaining information about at least two currently active cellular networks regarding the number and type of connections currently in use as admitted by the Examiner. The combined teachings of the *Sammarco*, *Chitrapu* and *Nave* references do not disclose obtaining information about at least two currently active cellular networks regarding the number and type of connections currently in use.

F. Combined Teachings of of Sammarco, Chitrapu and Nave Refences

Sammarco does not disclose or suggest “connection to active cellular networks for connected applications.

The combined teachings of *Sammarco* and *Chitrapu* fail to disclose deciding whether to allow establishing a new connection to one of the currently active cellular network systems based on factors including the information about the currently active cellular network systems.

The combined teachings of the *Sammarco*, *Chitrapu* and *Nave* references do not disclose obtaining information about at least two currently active cellular networks regarding the number and type of connections currently in use.

The Examiner fails to address the issue of two connected applications **simultaneously** hosted by the communication device.

For the above reasons, *Sammarco* in view of *Chitrapu* and further in view of *Nave*, fails to render claim 1 obvious.

Independent claim 8 includes the limitation of a network resource control, responsive to the request to allow establishing the connection, and also responsive to information about at least two currently active cellular network systems to each of which the mobile terminal has one or more active connections for respective connected applications simultaneously hosted by the apparatus, to determine whether to allow establishing the connection based on factors including the information about the at least two currently active cellular network systems wherein the information about connections currently in use includes at least the number and type of connections currently in use.

Independent claim 16 includes the limitation that the apparatus is caused to perform obtaining information about at least two currently active cellular network systems to each of which the apparatus has one or more active connections for respective connected applications simultaneously hosted by the apparatus, wherein the information includes at least the number and type of connections currently in use; and

deciding whether to allow establishing a new connection to one of the currently active cellular network systems on behalf of another application hosted by the apparatus based on factors including the information about currently active cellular network systems.

Independent claim 21 includes the limitation of means, responsive to information about two currently active networks to each of which a mobile terminal has one or more active connections, for determining whether to allow establishing a connection based on information about the connections currently in use including the number and type of the connections currently in use.

As with claim 1 above, *Sammarco*, in view of *Chitrapu*, and further in view of *Nave*, fails to render independent claims 8, 16 and 21 obvious.

G. Dependent Claims

Dependent claims 2, 3, 6, 7, 9, 10, 13-15, 17-20 and 23 are dependent from claims 1, 8, 16 and 21 and include further limitations. For reasons regarding claims 1, 8, 16 and 21 above, *Sammarco*, in view of *Chitrapu*, and further in view of *Nave*, also fails to render claims 2, 3, 6, 7,

9, 10, 13-15, 17-20 and 23 obvious.

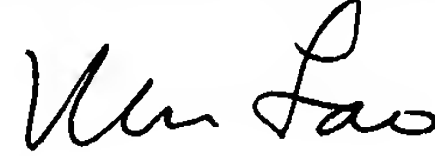
H. Allowable Subject Matter

At section 5 of the Office Action, the Examiner objects to claims 5, 12 and 22 as being dependent on a rejected base claim, but asserts that claims 5, 12 and 22 would be allowable if rewritten in independent form including all of the limitations of the base claims and intervening claims. Applicant respectfully submits that claims 5, 12 and 22 are allowable in their current form in view of the allowability of claims 1, 8 and 21 from which claims 5, 12 and 22 ultimately depend.

CONCLUSION

Claims 1-3, 5-10 and 12-23 are allowable. Allowance of all pending claims is earnestly solicited.

Respectfully submitted,



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